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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/672,859	11/09/2012	Peter G. Baumann	3520DIV	3051

98580 7590 04/14/2017  
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EXAMINER
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CECIL, TERRY K

ART UNIT	PAPER NUMBER
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1778

MAIL DATE	DELIVERY MODE
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04/14/2017

PAPER

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* PETER G. BAUMANN, LLOYD W. JOHNSON,  
DAVID SMITH, and EUGEN O. BERGMANN

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Appeal 2016-001315  
Application 13/672,859  
Technology Center 1700

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Before PETER F. KRATZ, KAREN M. HASTINGS, and  
ELIZABETH M. ROESEL, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejections of claims 2–8, 10, 12–16, 18–22, 28–31 and 33–38 under 35 U.S.C. § 103(a) as being unpatentable based on at least the combined prior art of Ellis (US 1,160,154; issued Nov. 16, 1915), Cooper (US 401,930; issued Apr. 23, 1889), and EP '037 (EP 498,037 A1; published September 12, 1991).<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b).

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<sup>1</sup> The rejection of claims 7, 18, and 33 includes additional prior art of Harms (US 3,394,815; issued July 30, 1968) (Final Act. 5).

Claims 22 and 37 are illustrative of the claimed subject matter:

22. A cloth media filtration device for supporting cloth filter media in a basin having opposing side walls and a floor, comprising:

- at least one elongated cloth media support structure having a length, cross-sectional shape and having two ends, at least one end being an open end, for placement in a gravity feed treatment basin wherein the at least one cloth media support structure remains submerged and stationary during use and which forms an effluent plenum, the open end of which is in fluid communication with an outlet of the treatment basin, for the discharge of filtered effluent, wherein each of said ends is mounted to and supported by said opposing side walls, and the at least one cloth media support structure is suspended above the floor of the basin;

- a traversing backwash system for periodic cleaning of the cloth filter media using a backwash shoe and suction; and

- a control system for regulating periodic cleaning of the cloth filter media.

37. A cloth media filtration system for treating an influent of water or wastewater in a gravity feed treatment basin, the treatment basin having opposing side walls and a floor, comprising;

- a stationary cloth media support structure having a length, two ends and a cross-sectional shape, at least one end having an opening which is generally perpendicular to an opposing side wall of the basin and which is in fluid communication with an outlet of the treatment basin through said opposing side wall, and each end of said support structure mounted to and supported by said opposing side walls and wherein the cloth media support structure is suspended above the floor of the basin;

a cloth filter media attached to and supported by said support structure and forming a substantially hollow effluent plenum; and  
a traversing backwash system including a backwash shoe for periodically cleaning said cloth filter media with suction.

Independent claim 38 is directed to a filtering apparatus similar to claim 37, except it adds a control system to control the backwashing assembly similar to claim 22.

#### ANALYSIS

The Examiner has the initial burden of establishing a *prima facie* case of obviousness based on an inherent or explicit disclosure of the claimed subject matter under 35 U.S.C. § 103. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992) (“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.”). “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (*quoted with approval in KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)).

The fact finder must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (warning against a “temptation to read into the prior art the teachings of the invention in issue”)).

After review of the respective positions provided by Appellants and the Examiner, we agree with Appellants that the Examiner has not met the applicable burden in this case. A preponderance of the evidence supports Appellants' assertions that the Examiner's rejection is based on improper hindsight in proposing to modify Ellis to have the configuration of elements including a filtration device suspended above the floor of the gravity feed treatment basin using gravity feed and a traversing backwash system all configured as required by each independent claim.

Appellants' arguments focus in part on the lack of a reason to combine the gravity feed (that is, outside-in flow through the filter element) filtration device of Ellis with the pressure feed inside-out filtration flow of Cooper (e.g., App. Br. 14–26; Reply Br. 11). Appellants also rely upon the Smith Second Supplemental Declaration (dated July 25, 2014) to buttress their arguments throughout their briefs (*generally* App. Br.; Reply Br.). The Examiner responds that Appellants' claims “do not require a specific direction of flow through the filter” (Ans. 6). Contrary to the Examiner's position, we agree with Appellants that each independent claim requires an outside-in filtration (e.g., Reply Br. 11 (Appellants explain that “the claims specifically require gravity filtration, which, in the context of the claimed invention, clearly means outside-in filtration.”))).

Appellants point out that Ellis specifically states an object of its invention is to produce “a straining device of this kind in which the strainer can be easily removed and cleaned” (App. Br. 19; Reply Br. 11). Cooper is configured to supply a flow from a header supply tube d via nozzles e to the

inside of each of the filtration tubes such that the filtration operates in the reverse direction of Ellis' filtration device (Cooper Figs. 1–3, p. 1). Cooper provides for removability of the filter medium to facilitate cleaning, yet provides for a tight seal at each end of the tubes when in use for inside-out filtration (e.g. App. Br. 25). Appellants urge that one would not have combined these references, and further that each reference teaches away from the *in situ* cleaning of EP 037 (e.g. App. Br 25 (stating that the *in situ* cleaning system (that is, cleaning in place) of EP 037 is contrary to the teachings and purpose of both Ellis and Cooper)).

Accordingly, a preponderance of the evidence supports Appellants' position that the Examiner is using impermissible hindsight to reconstruct Ellis with Cooper and then modify further with a traversing backwash system to clean the filter elements(s) *in situ* as taught in EP 037. The Examiner has not adequately explained why the skilled artisan's knowledge or inferences and creativity would have supported the obviousness determination based on the teachings of the applied references without an improper hindsight reconstruction.

The Examiner does not establish that Harms as applied in the § 103 rejection of dependent claims 7, 18, and 33 cures these deficiencies and/or otherwise provides another rationale that cures these deficiencies.<sup>2</sup>

Accordingly, we reverse the § 103 rejections on appeal.

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<sup>2</sup> Since we determine that the Examiner has not established a *prima facie* case of obviousness, we do not reach Appellants' remarks and proffered evidence of secondary considerations, e.g., commercial success.

Appeal 2016-001315  
Application 13/672,859

ORDER

It is ordered that the Examiner's decision is reversed.

REVERSED